**Stat & Data Analysis Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**10.1 part 1 CW DATE: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ BLOCK: \_\_\_\_\_**

|  |  |
| --- | --- |
| **Ethnic Group** | **Number in Sample** |
| White | 679 |
| Black | 51 |
| Hispanic | 77 |
| Asian | 190 |
| Other | 3 |

1. According to Census Bureau data, in 1998 the California population consisted of 50.7% whites, 6.6% blacks, 30.6% Hispanics, 10.8% Asians, and 1.3% other ethnic groups. Suppose that a random sample of 1000 students graduation from California colleges and universities in 1998 resulted in the following data on ethnic groups; these data are consistent with summary statistics contained in the article “Crumbling Public School System a Threat to California’s Future” (*Investor’s Business Daily*, November 12, 1999):

Do these data provide evidence that the distribution of ethnic groups of graduating college students differs from the distribution of ethnic groups of the state? Test the appropriate hypotheses using an alpha level of 0.01.

1. Are heart attacks more likely on Mondays? Or Tuesdays? Researchers took an SRS of 200 working people who had recently had heart attacks and asked them which day they had their heart attacks. The data is below. Does the data present sufficient evidence to indicate that there is a difference in the incidence of heart attacks depending on the day of the week? (In other words, is the distribution uniform?)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sunday** | **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** | **Saturday** |
| 24 | 36 | 27 | 26 | 32 | 26 | 29 |